

Quick Installation Guide

Fastrax III

**1/4" Day/Night Dome Camera, PTZ, 22x
EDC-3222B**



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Ⓓ Komplette Betriebsanleitung

ⒼⒷ Full Manual

Ⓕ Mode d'emploi complète

ⒼⓁ Kompletna Instrukcja instalacji i obsługi



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NOTE: The full manual is only available in English.

1. Safety Instructions / Maintenance

- Read these safety instructions and the operation manual first before you install and commission the camera.
- Keep the manual in a safe place for later reference.
- Protect your camera from contamination with water and humidity to prevent it from permanent damage. Never switch the camera on when it gets wet. Have it checked at an authorized service center in this case.
- Never operate the camera outside of the specifications as this may prevent the camera functioning.
- Do not operate the cameras beyond their specified temperature, humidity or power ratings.
- Operate the camera only at a temperature range of 0°C to +50°C and at a humidity of max. 90%.
- To disconnect the power cord of the unit, pull it out by the plug. Never pull the cord itself.
- Pay attention when laying the connection cable and observe that the cable is not subject to heavy loads, kinks, or damage and no moisture can get in.
- Do not attempt to disassemble the camera board from the dome.
- The warranty becomes void if repairs are undertaken by unauthorized persons. Do not open the camera housing.
- Never point the camera towards the sun with the aperture open. This can destroy the sensor.
- Installation, maintenance and repair have to be carried out only by authorized service centers. Before opening the cover disconnect the unit from mains input.
- Contact your local dealer in case of malfunction.
- Only use original parts and original accessories from Videor E. Hartig GmbH.
- Do not use strong or abrasive detergents when cleaning the dome. Use a dry cloth to clean the dome surface. In case the dirt is hard to remove, use a mild detergent and wipe gently.
- All openings provided in the housing for assembly purposes must be closed and/or sealed.
- **The installer is responsible for ensuring that the degree of protection as per the technical specifications is upheld, e.g. by using all enclosed gasket seals and O-rings, by waterproofing the cable exits with silicon or through laying the cable in such a way that the cable does not act as a „gutter“.**
- **During assembly, care must be taken to ensure that existing seals are correctly inserted and are not displaced as a result of assembly. You must not continue to use damaged seals.**

NOTE: This is a class A digital device. This digital device can cause harmful interference in a residential area; in this case the user may be required to take appropriate corrective action at his/her own expense.

2. Introduction

2.1 Features

The Fastrax III dome camera and the keyboard controller make up the building blocks for any surveillance/security system. Using multiple Keyboard Controllers and multiple dome cameras, no place is too large for monitoring. Extensible and flexible architecture facilitates remote control functions for a variety of external switching devices such as multiplexers and DVRs.

- Built-in optical power zoom camera with True Night Shot function
- 240 Preset positions.
- 8 Tours consist of Preset, Pattern, Auto-Scan and other Tours can be programmed with over 300 functions and Preset location. While moving, each Preset scan can be watched in smooth **Vector Scan** mode.
- 16 Auto Scans with the normal, the vector, and the **random** mode and the Endless **Auto-Pan** with 13 speed steps
- 8 Patterns (up to 500seconds)
- 8 Privacy zones
- 16 Area Titles
- 8 Alarm inputs / 4 Aux outs (NC & NO)
- Variable speed from 0.1°/sec to 380°/sec
Three Variable speed (SLOW, NORMAL, TURBO). Turbo speed is Max 380°/sec with CTRL key pressed
- Pan / Tilt speed is inversely proportional to the zoom ratio with the option.
- Maximum speed is 380°/sec when preset command
- Auto Calibration from 0.1° to 6° (Tilt range is 0° to 180°)
- Programmable user preferences (alarm, preset, title, etc.)
- 180° Digital Flip or 90° Auto Flip depended on the model
- Up to 999 selectable camera addresses (3999 by software setting)
- Multi-Language Menu Display, Password Confirmation
- Function Run Menu using DVR without function key (Pattern, SCAN, ...)
- Built-in RS-485/422 receiver driver
- Optional Clear bubble with black liner (shelter) for concealing the camera
- Optional Tinted Bubble, Indoor & Outdoor pendant housing with heater & blower, Indoor Flush mount, Parapet mount & Roof Top mount

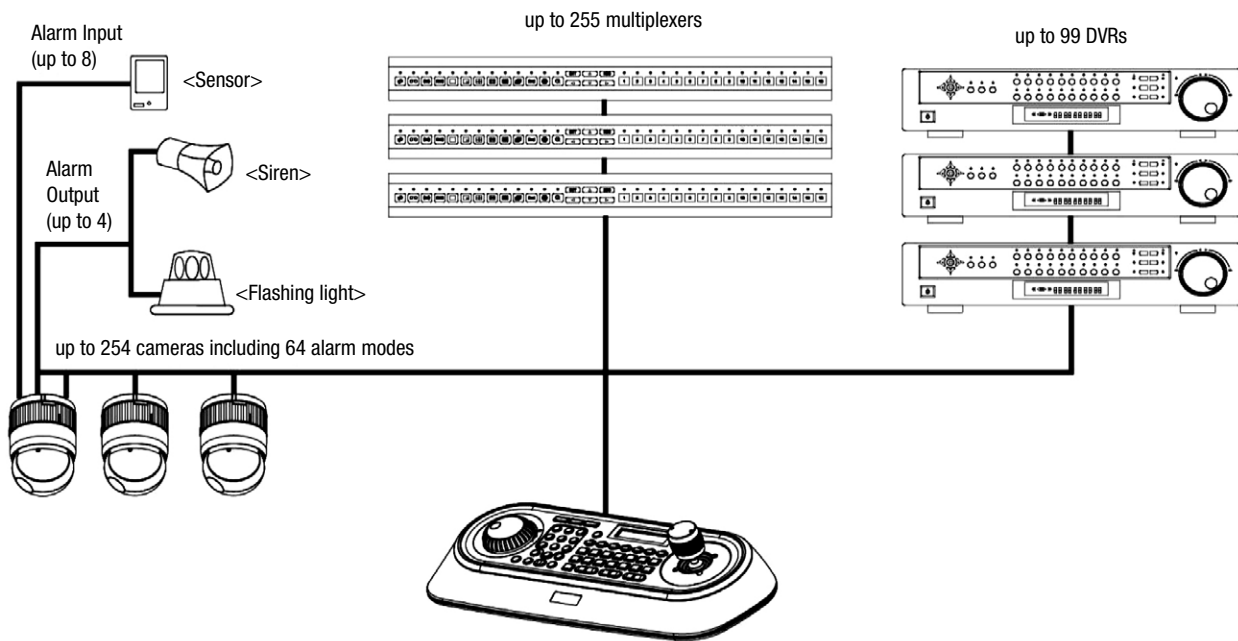


Figure 1 - Typical System Configuration

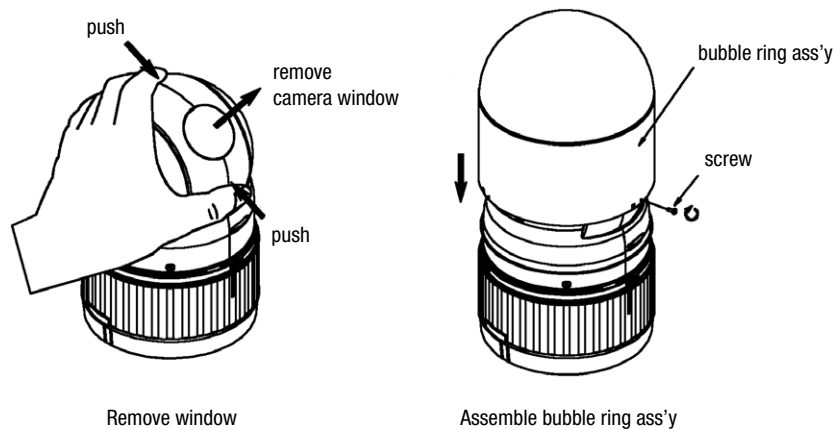


Figure 2 - Optional Assemble bubble ring ass'y

NOTE: It is recommended to remove camera window for improving picture quality when you assemble bubble ring ass'y.

CAUTION: When installing a Fastrax dome on a high pole outside, caution should be taken to avoid vibration and shaking of Fastrax dome due to windload or shock of passing heavy vehicles. If pole is not stable enough, it may cause malfunction in accurate tilt positioning.

3. Installation and Configuration

3.1 Package Contents

The package contains the following:

- 1x Fastrax III (Dome Camera)
- 1x Bubble ring (optional)
- 1x Instruction manual
- 3x Assembly screws for attaching Fastrax III
- 3x Plastic anchor
- 1x 10Pin Connector
- 2x 12Pin Connector

CAUTION: Be sure to have caution labels (E version only) on both body and base of the camera.
Different version will not support alarm input and output.

The dome camera is for use in surface mounting applications and the mounting surface should be capable of supporting loads up to 4.5kg.

The dome camera's base should be attached to a structural object, such as a hard wood, wall stud or ceiling rafter that supports the weight of the dome camera.

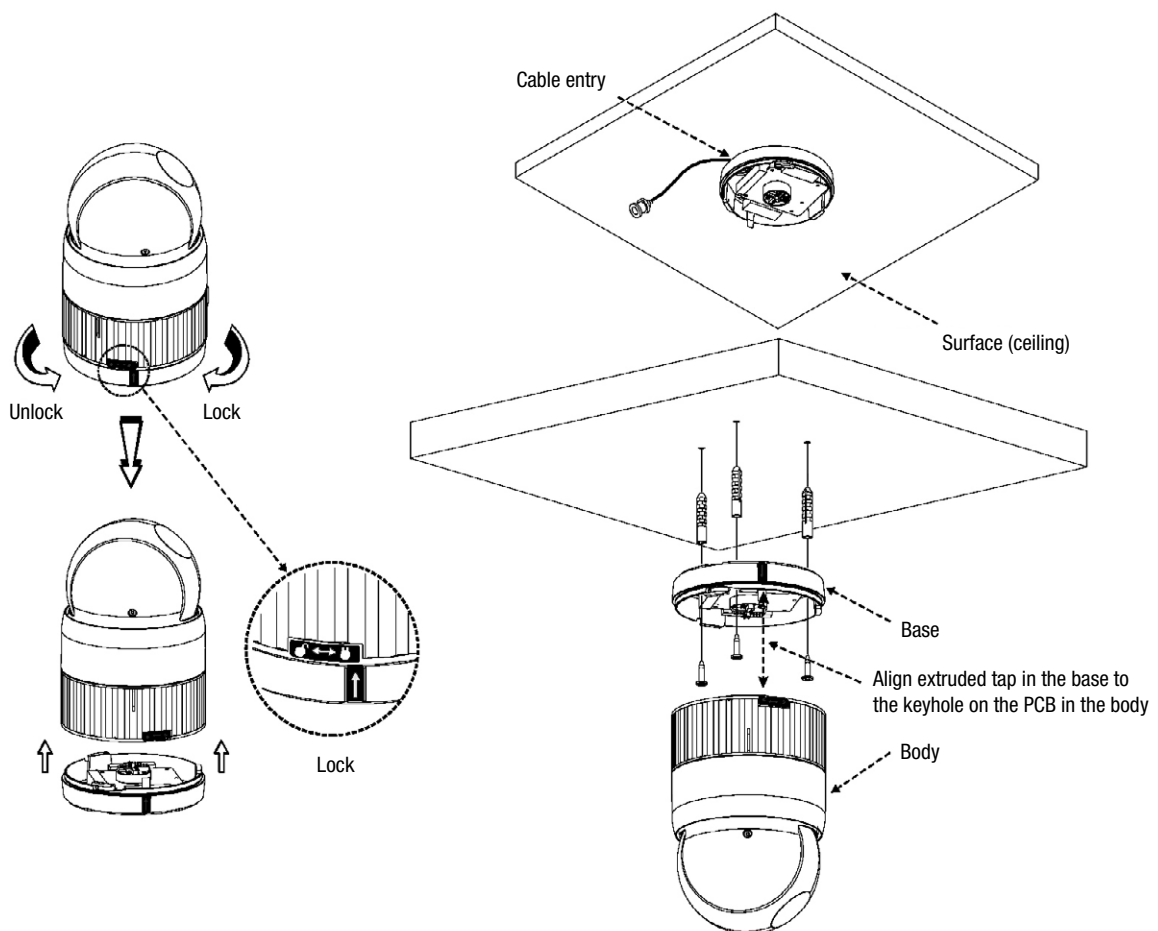


Figure 3 - Installation

3.2 Basic Configuration of Fastrax III Dome Camera System

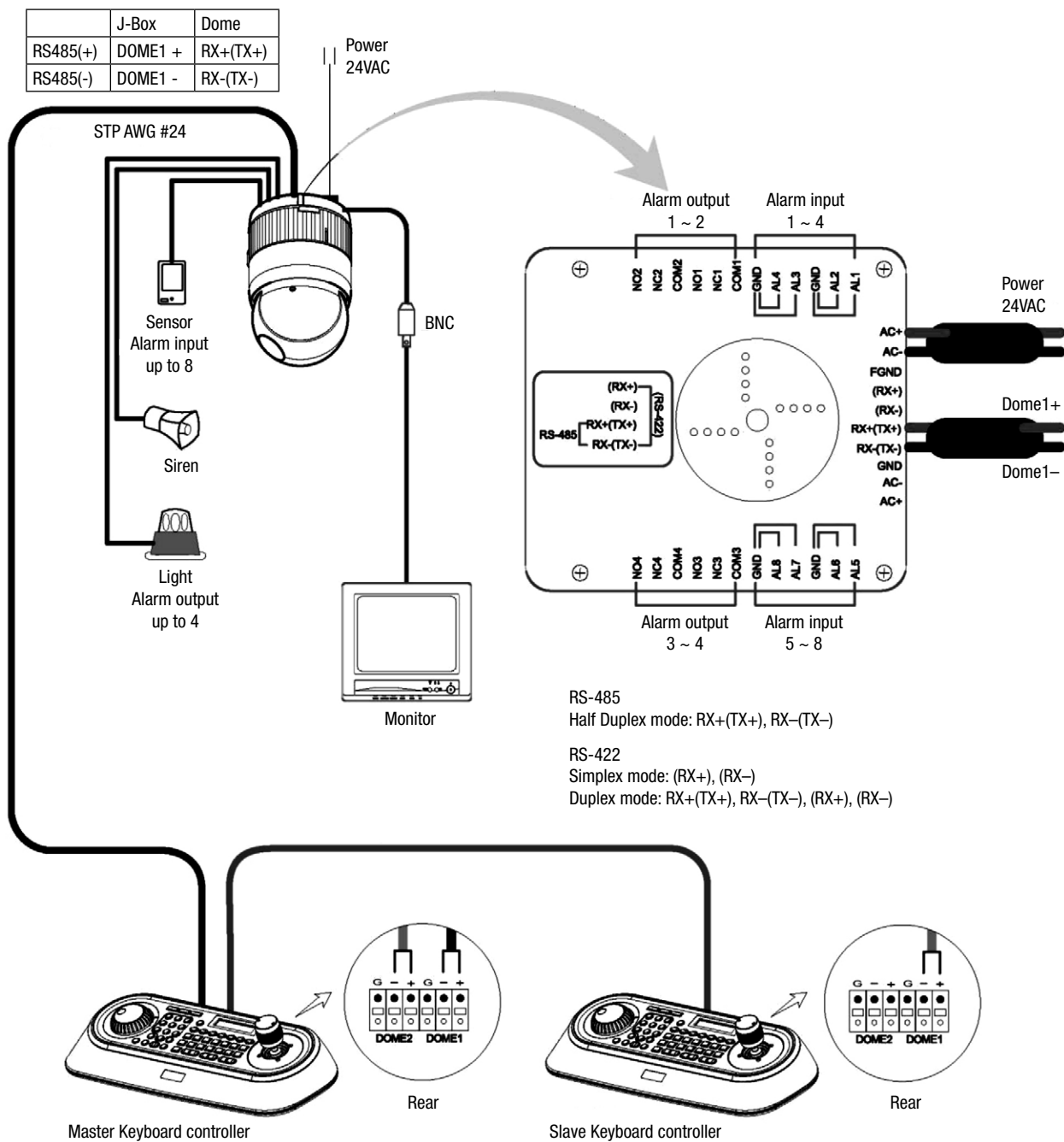


Figure 4 - Basic installation diagram

The dome camera must be installed by qualified service personnel in accordance with all local and federal electrical and building codes. The system should be installed according to Figures 4 through 9.

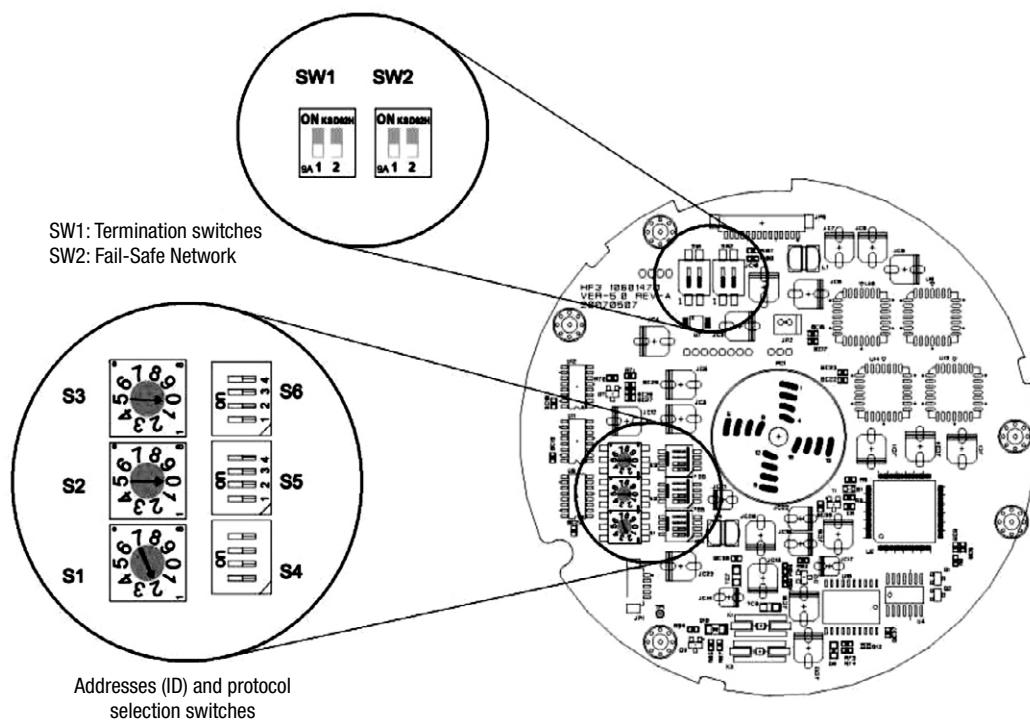
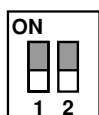


Figure 5 - Layout of Switches

3.3 Setting Dome Camera Termination

The device which is connected at end of line, whether it be a dome camera or keyboard controller, must have the cable for communication terminated by setting the appropriate DIP switch. Without proper termination, there is potential for control signal errors. Total length of the cable for communication should not exceed 1.2km.

SW1



SW1	1	2
Terminated	ON	ON
Not terminated	OFF	OFF

Figure 6 - Setting Dome Camera Termination

3.4 Fail-safe Network

When you control the dome by the other device not own keyboard, some error may be existed in the serial communication. The reason is caused by the other device without the fail-safe network.
At this time, you solve the problem to set this DIP switch to ON of the nearest dome from the other device only.

SW2

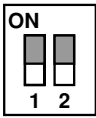
	SW2	1	2
	ON	PULL-UP	PULL-DOWN
	OFF	NONE	NONE

Figure 7 - Setting Dome Camera Termination

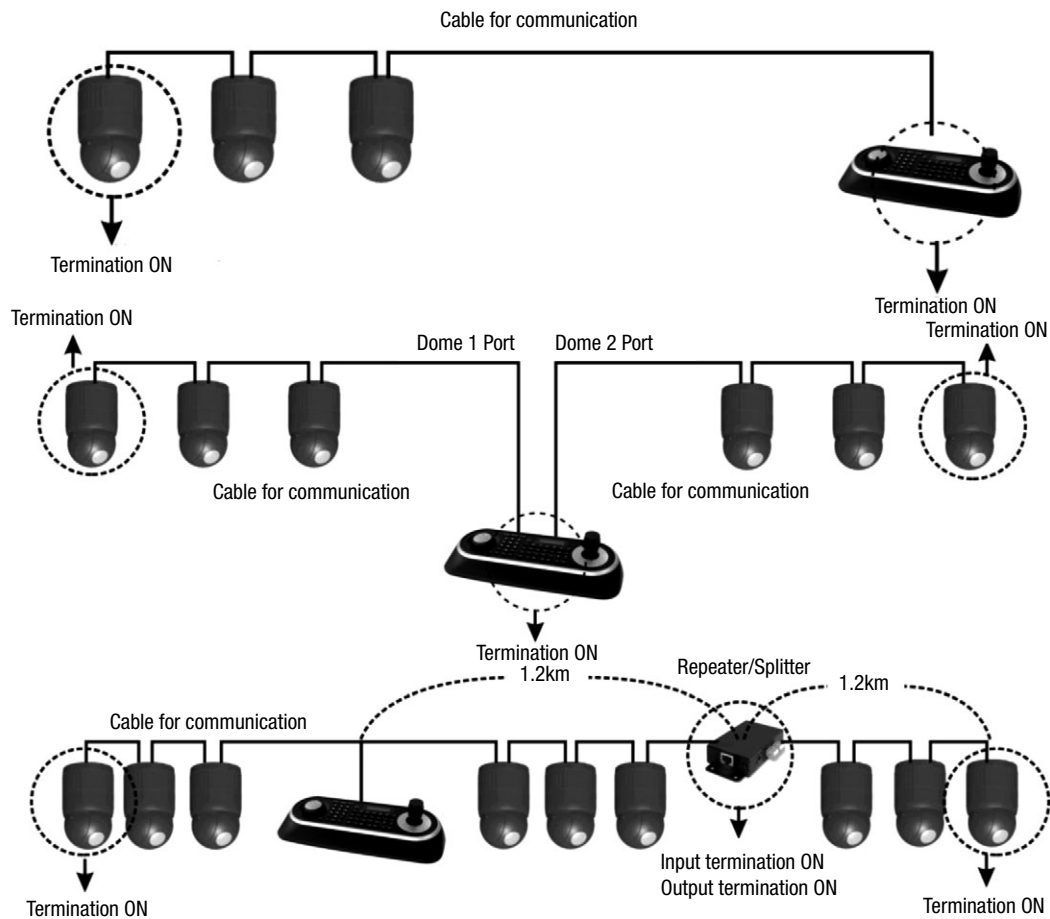


Figure 8 - Termination Diagram

3.5 Setting Dome Camera Address (ID)

To prevent damage, each dome camera must have a unique address (ID). When installing multiple dome cameras using a multiplexer, it is suggested that the dome camera address matches the multiplexer port number.

If you want to set the address more than 999, you should connect the service provider.

Example: Port 1 = Dome 1, Port 2 = Dome 2 ... Port 16 = Dome 16. If more than 16 dome cameras are installed using two or more multiplexers, ID of the dome camera should be ID of MUX x No. of camera IN. (e.g. multiplexer ID= n, Camera IN= m then ID of Dome =16x (n-1) +m)

Refer to Figures 4-5 for setting the dome camera address (ID) and protocol selection.

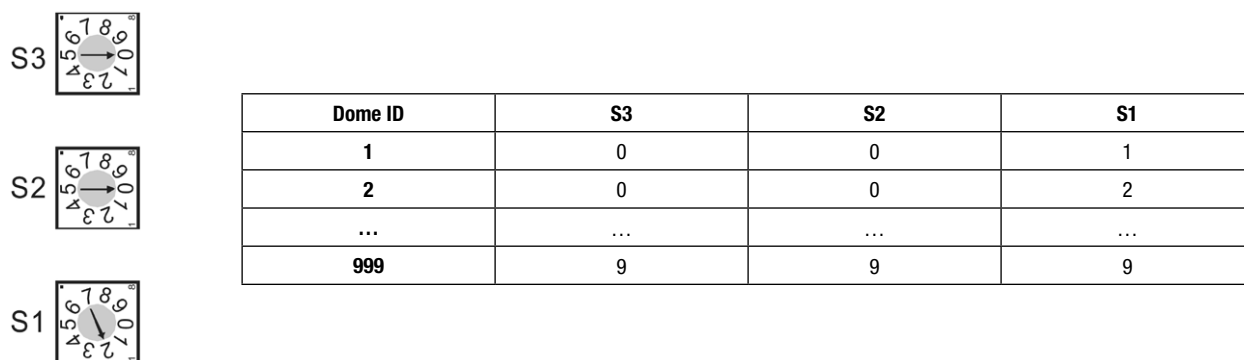
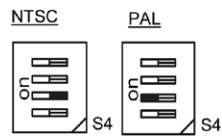


Figure 9 - Setting Dome Camera Address (ID)

3.6 Setting Dome Camera Protocol

If a dome camera is to be installed with a Fastrax keyboard controller, select the default protocol.

Consult service personnel if a dome camera is installed with device other than a keyboard controller.



S/W		On	Off	Function
D1	S4-1	Enable	Disable	Alarm
D2	S4-2	PAL	NTSC	NTSC/PAL
D3	S4-3			(Reserved)
D4	S4-4	RS-422	RS-485	RS-422/RS-485

D5	D6	D7	D12	Protocol
S5-1	S5-2	S5-3	S6-4	
Off	Off	Off	Off	F2, F2E, Pelco-D, Pelco-P: Default
Off	Off	On	Off	F2, F2E
Off	On	Off	Off	Sensormatic RS-422
Off	On	On	Off	Pelco-D, Pelco-P
On	Off	Off	Off	Vicon
On	Off	On	Off	Ernitec
On	On	Off	Off	(Reserved)
On	On	On	Off	F2
Off	Off	Off	On	Philips (Bosch)
Off	Off	On	On	(Reserved)
Off	On	Off	On	Dynacolor
Off	On	On	On	(Reserved)

D8	D9	D10	Baud Rate
S5-4	S6-1	S6-2	
Off	Off	Off	2400 bps
Off	Off	On	4800 bps
Off	On	Off	9600 bps (Default)
Off	On	On	19200 bps
On	Off	Off	38400 bps

D11	Parity Bit
S6-3	
Off	None
On	Even

Figure 10 - Protocol Selection Switches

3.7 Connections

- **Connecting to the RS-485/-422**

The dome camera can be controlled remotely by an external device or control system, such as a control keyboard, using RS-485 half-duplex, RS-422 full duplex or simplex serial communications signals. Connect Marked Tx+, Tx- to Tx+(Rx+) and Tx-(Rx-) of the RS-485 control system.

If control system is RS-422, connect Rx+(Tx+), Rx+ (Tx-) and Rx+, Rx- of the dome camera to Rx+, Rx- and Tx+, Tx- of the control device respectively.

- **Connecting Video out connector**

Connect the video out (BNC) connector to the monitor or video input.

- **Connecting Alarms**

AL1 to 8 (Alarm In)

You can use external devices to signal the dome camera to react on events. Mechanical or electrical switches can be wired to the AL (Alarm In) and GND (Ground) connectors. See Chapter 3 - Program and Operation for configuring alarm input.

GND (Ground)

NOTE: All the connectors marked GND are common.

Connect the ground side of the Alarm input and/or alarm output to the GND connector.

NC(NO)1 TO 4 (Normal Close or Normal Open: Alarm Out)

The dome camera can activate external devices such as buzzers or lights. Connect the device to the NC(NO) (Alarm Out) and COM (Common) connectors. See Chapter 3 - Program and Operation for configuring alarm output.

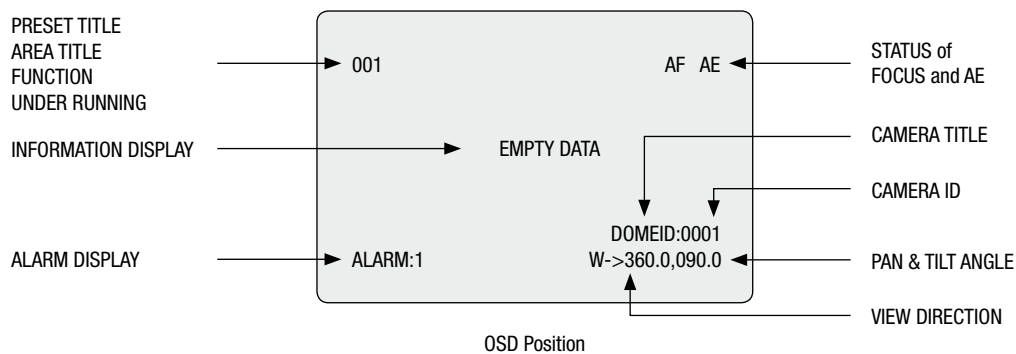
- **Connecting the Power**

Connect the power of 24VAC 850mA to the dome camera.

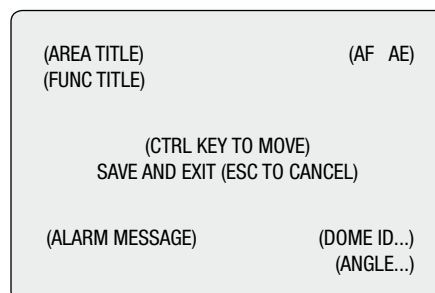
Use certified / Listed Class 2 power supply transformer only.

3.8 Getting Started

Once installed apply power to the dome camera. The dome camera will start a configuration sequence.



The dome can move the OSD position in the OSD position setup.



OSD Position Setup

4. Program and Operation

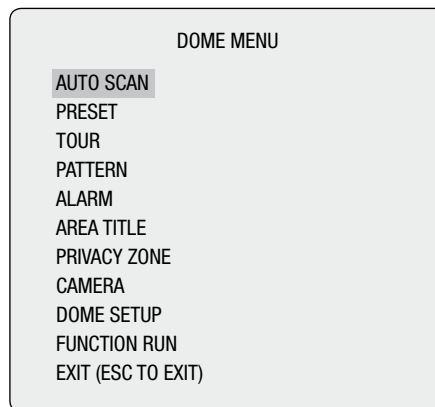
4.1 Dome Camera Selection

Before you program or operate a dome camera, you must select the dome camera by pressing the dome camera **No.** + **CAM**.

Example: Pressing **1, 0** and **CAM** key sequentially will select dome camera 10. The selected dome camera ID will be displayed on the LCD monitor of the keyboard controller.

4.2 Accessing On-Screen Menu Utility

You can call up the On-screen menu utility on your monitor by pressing **MENU** key on the keyboard controller, the following On-screen menu utility will appear:



4.3 How to control On-Screen Menu Utility

Button	Function
MENU	Call on On-screen menu utility
Joystick up or down	Navigate through the menu items.
Joystick left or right or IRIS OPEN	Go into the sub-menu items.
Joystick left or right or Zoom handle twist or Tele, Wide	Change value. Enter the editing title mode.
CTRL + Joystick	Change value of angle.
IRIS OPEN	Enter the changing angle mode.
IRIS CLOSE	Exit the changing angle mode.
ESC	Escape (EXIT)

4.4 More Information

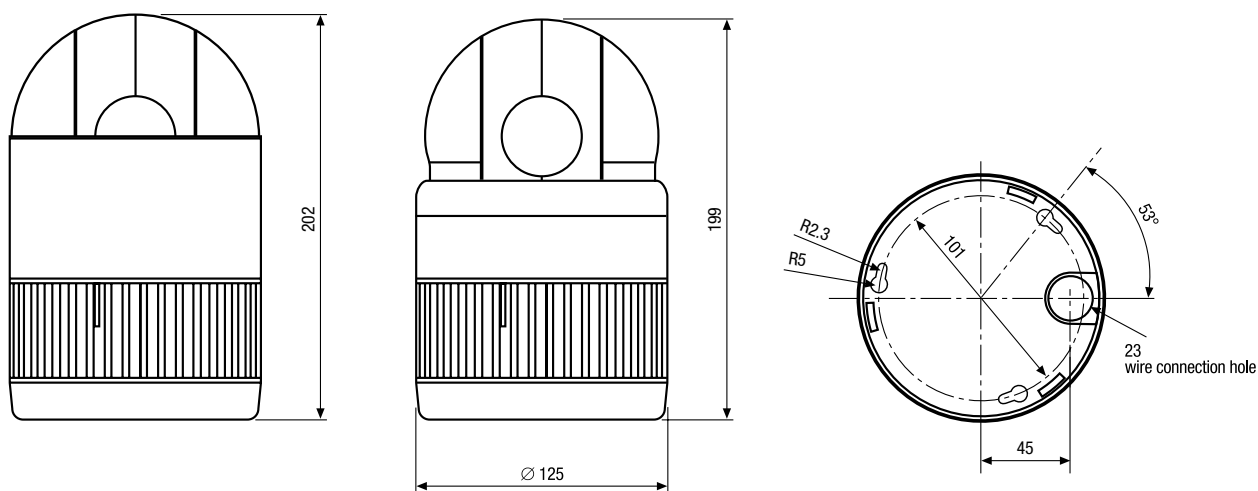
For more information, please see the Full Installation and Operating Manual.

5. Short Cut Key

Short Cut Key	Function		
PRST	Pop up preset setup menu		
TOUR	Pop up Tour setup menu		
PTRN	Pop up Pattern setup menu		
SCAN	Pop up Auto Scan setup menu		
NO. + PGM + PRST	Store the current view at the selected number		
Short Cut Key	Function	Short Cut Key	Function
1 + ON	Turn On Relay 1	1 + OFF	Turn Off Relay
2 + ON	Turn On Relay 2	2 + OFF	Turn Off Relay
3 + ON	Turn On Relay 3	3 + OFF	Turn Off Relay
4 + ON	Turn On Relay 4	4 + OFF	Turn Off Relay
7 + ON	Change FOCUS to AUTO	7 + OFF	Change FOCUS to manual
8 + ON	Change AE to AUTO	8 + OFF	Change AE to manual
9 + ON	Change Night Shot to AUTO		
10 + ON	Night Shot ON (go to the manual mode)	10 + OFF	Night Shot OFF (go to the manual mode)
11 + ON	BLC ON (AE auto mode)	11 + OFF	BLC OFF (AE auto mode)
12 + ON	Digital Zoom ON (According to digital zoom setting)	12 + OFF	Digital Zoom OFF
13 + ON	Dome OSD ON	13 + OFF	Dome OSD OFF
14 + ON	Dome Area Title Display ON	14 + OFF	Dome Area Title Display OFF
15 + ON	View Direction ON	15 + OFF	View Direction OFF
100 + ON	Shutter speed auto		
101 + ON	Shutter speed 1/4 (PAL 1/3) sec		
102 + ON	Shutter speed 1/2 sec		
103 + ON	Shutter speed 1 sec		
104 + ON	WDR ON	104 + OFF	WDR OFF
105 + ON	Image Stabilizer ON	105 + OFF	Image Stabilizer OFF
150 + ON	Image Flip ON	150 + OFF	Image Flip OFF
151 + ON	Origin Check		
152 + ON	Place the camera in the 0° area horizontally.		
153 + ON	Go to the slow speed mode	153 + OFF	Go to the normal speed mode
154 + ON	Display System Information		
155 + ON	Flip the camera in the 180° area horizontally.		
250 + ON	Set the dome ID up to 3999		
888 + ENTER	Night Shot ON (in the global mode only)		
999 + ENTER	Night Shot OFF (in the global mode only)		

Some function may not operate according to the model.

7. Dimensional Drawings



Dimensions: mm



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